

LISTING OF THE CLAIMS:

1. (Currently Amended) An analytical shell-model producing apparatus, ~~for producing an analytical shell-model for use in numerical analyzing from a configuration model, which is produced by a three-dimensional configuration modeler~~ for converting a configuration model produced by a three-dimensional configuration modeler into an analytical shell-model for numerical analysis, comprising:

a reference-plate thickness size inputting means for inputting a reference-plate thickness size to be used when specifying a thin-plate portion from the configuration model; and

means for making two (2) surfaces, being narrower ~~therebetween~~ therebetween than the reference-plate thickness size, which is inputted from said reference-plate thickness inputting means, in a pair of surfaces, producing an offset-surface between the pair of surfaces, and producing an internal-surface model by seaming on an outer periphery portion of the offset-surface.

2. (Original) The analytical shell-model producing apparatus, as described in the claim 1, further comprising means for producing a thickness attribute of said internal-surface model from face-to-face distance between the surfaces of said pair and a value of the plate thickness.

3. (Currently Amended) An analytical shell-model producing apparatus ~~for producing an analytical shell-model to be use in numerical analyzing, for a configuration model, which is produced by a three-dimensional configuration modeler~~ for converting a configuration model produced by a three-dimensional configuration modeler into an analytical shell-model for numerical analysis, comprising:

a reference-plate thickness inputting means for inputting a reference-plate thickness size to be used when specifying a thin-plate portion from the configuration model;

a pair-surfaces acknowledging means for acknowledging two (2) surfaces, being equal or less than the reference-plate thickness size, which is inputted by said reference-plate thickness inputting means, in face-to-face distance between the arbitrary two (2) surfaces constructing the configuration model;

a top/bottom side rib attribute acknowledging means for acknowledging the ~~pair-surface~~ pair-surfaces acknowledged by said ~~pair-surface~~ pair-surfaces acknowledging means to be one of a top side surface, a bottom side surface, and a rib surface;

an offset-surface producing means for producing an offset-surface by offsetting a group of surfaces on either the top side or the bottom side, which are acknowledged by said top/bottom side rib attribute acknowledging means, and the rib surface, respectively, in direction of a normal line ~~directing in an~~ towards the inside of the configurations thereof;

a seam-surface producing means for seaming between the offset-surface, which is produced from either the top or the bottom surface by means of said offset-surface producing means, and also the offset-surface produced from the rib surface; and

an internal-surface producing means for registering the offset-surface seamed by said seam-surface producing means, as in a form of an internal-surface model.

4. (Original) The analytical shell-model producing apparatus, as described in the claim 3, further comprising a top/bottom rib attribute emphatic displaying means for displaying the top side surface, the bottom side surface and the rib surface, which are acknowledged by said top/bottom side rib attribute acknowledging means, with making emphasis thereon.

5. (Original) The analytical shell-model producing apparatus, as described in the claim 3, further comprising a dialog top/bottom side rib attribute amending means for amending the top side surface, the bottom side surface and the rib surface, which are acknowledged by said top/bottom side rib attribute acknowledging means, in a manner of dialog.

6. (Currently Amended) The analytical shell-model producing apparatus, as described in the claim 3, ~~wherein said internal surface model producing means calculates the plate thickness on each of the internal surface models as targets from the face-to-face distance between two (2) surfaces of the pair, to which a composite surface of the configuration model belongs, being as an original for producing the each internal surface model, thereby giving this plate thickness value as to be the thickness attribute of the internal surface model of target~~ wherein said internal-surface model producing means calculates the plate thickness on each of the internal-surface models as targets from the face-to-face distance between two (2) surfaces of the pair, and wherein this calculated plate thickness is set as the thickness attribute of the internal surface model of the target.